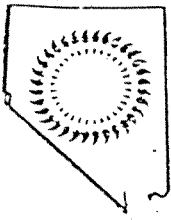


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NEVADA CLIMATE SUMMARY



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FOR MAY 1987
VOLUME 5, NUMBER 6
JUNE 1987

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SYNOPSIS

May 1987 will undoubtedly be etched in the Nevada climate record books for some time to come. It was a warmer and wetter than normal month Statewide. Temperatures averaged from less than one degree to over five degrees above normal, and rainfall was between three and six times normal over much of the western half of the Silver State and the northern portion of Southern Nevada. Several new records were set for May wetness. Battle Mountain, with 4.91" even had the most precipitation for any month in a 117 year-long record! In fact, two-thirds of the normal annual precipitation fell at Battle Mountain this month! Reno had the heaviest 30 minute rainfall (1.54") ever recorded there in a record that goes back over 50 years. This was also one of the heaviest 30 minute falls ever recorded in Nevada. Standing out most recently is the 1.87" recorded in 24 minutes at Las Vegas Airport in July 1984.

The number of rainy days and thunderstorm days were also unusually high for May, with new records set at many locations. In addition, several funnel clouds and two tornadoes were observed in the Northeast during the last week of the month. Also, a tornado was reported at Ruth, near Ely, on the 17th. Very little damage occurred due to the sparseness of population in these areas.

TEMPERATURE

Temperatures were above normal Statewide, ranging from less than one degree warmer than normal at a few Southern and South Central Nevada locations, to 5.2° above at Reno Airport. With one exception, no new records for heat or cold were approached this month. The exception was the 7° reading at Tuscarora on the 1st, only 3° higher than the all-time Nevada low for May, recorded at Marlette Lake (at 8000', near Lake Tahoe) in 1933.

The century mark was reached for the first time this year at a few locations in the south, such as Las Vegas Sunrise Manor (100°), Laughlin (107°), and Logandale (108°). In fact, it was 100 degrees or warmer on 13 days at Laughlin, where the temperature averaged out just about normal for May.

Heating degree days were below normal Statewide, as the unusually warm temperatures meant fewer heating requirements for homes, schools, businesses, etc.

PRECIPITATION

Only the southern tip of Nevada did not have above normal precipitation during May, as the .02" recorded at Laughlin barely wet the ground. Just to the north, Logandale (.24"), Searchlight (.32"), and Boulder City (.36") reflected this dryness, although they were still near or slightly above normal. Otherwise, most of Nevada enjoyed two times or more normal rainfall, with one-third to one-half of the reporting sites recording three times or more the May normal. For example, the 6.16" at Beowawe, (the wettest site in Nevada in preliminary reports), was over six times normal for May, and represents 78% of the normal annual total. This was the second wettest month in the 117 year-long record at this Humboldt River location, as May 1930 brought 7.44". However, several places did have the wettest May on record, such as Lovelock, with 2.43", breaking the old record of 2.31" set in 1963. The record here is 92 years long. Also, Austin with 5.27" broke the 4.30" mark set in May 1917, and narrowly missed the wettest for any month, 5.36" in March 1946. The Austin record is 100 years long. This was also the wettest May at Winnemucca since records began 117 years ago, with 3.54" obliterating the old mark of 2.87" set in 1957. The 1.70" 24 hour fall there was also the second wettest on record for any month. Tonopah had the wettest May since records began in 1902, as 2.59" was recorded, breaking the 2.50" mark of 1921. The Tonopah Airport also had the second wettest May (1.97"), versus the record of 2.00" set in 1962. The record began there in 1954. It was also the wettest May at Jiggs (south of Elko) with 4.93", breaking the mark of 3.95" set in 1962. In addition, this was the second wettest month of record at Jiggs, following the 7.03" of July 1944. The record here is 77 years long. Some other new May rainfall records were set at Mountain City (4.17" and 32 years), Desert National Wildlife Refuge (.75" and 47 years), while it was the second wettest May at Fallon Experimental Station (2.38" versus 2.73" in 1898), and Rye Patch Dam (2.26" versus 2.57" in 1953).

The number of rainy days during May was more like Western Oregon than Nevada, as several locations had a record number of days with a trace or more of precipitation, such as Wildhorse Reservoir (19 rainy days), Dyer, Great Basin National Park, Beowawe and Battle Mountain (18 days) and Wells (16 days). At the University of California High Elevation Research Station's Barcroft Laboratory at 12,700' in the White Mountains just west of Dyer, 5.46" of precipitation fell in daily precipitation from the 9th-30th. This amounted to 38 inches of snowfall, with a pack of 15" and drifts up to 3 feet on the 30th.

The nine days with thunder at Reno Airport was the most recorded in May in a 50+ year-long record, and was about three-fourths of the normal annual total. The 15 thunder days at Reno in April and May was also a record for that period.

Water year precipitation (Oct. 1, 1986-June 1, 1987) improved Statewide, but will have little effect on unusually low stream runoff caused by an extremely dry and uncommonly snowless winter. However, the heavy May precipitation will help some local water needs, as well as requiring less early irrigation for lawns, plants, and agriculture. Also, rangelands are wetter, putting the worst of the fire season off a bit.

Water year precipitation now generally ranges from 150-180% of normal in the southern one-third of the State, to 70-90% of normal in the West, and 75-125% in the northern one-third of Nevada.

SUNSHINE, WIND & EVAPORATION

Sunshine hours were well above normal in the East and North (e.g., Ely 76% of the normal sun hours with a normal of 71%, and Winnemucca 84% versus 70%), but were well below normal in the West and South (e.g., Reno 63% and a normal of 82%, and Las Vegas 81% versus 88%).

Wind speeds averaged a little above normal in the West and North, but were somewhat below normal elsewhere. The numerous thunderstorms that were present this month caused wind gusts between 50 and 60 mph at several locations.

Evaporation was slightly above normal in Southern Nevada, where Boulder City for example had 13.29" and a normal of 12.80", but were below normal in the rest of Nevada. The warmer than normal temperatures were offset by the unusually wet conditions. For example, at Fallon, pan evaporation (5.31") was only 66% of the long-term normal. At Rye Patch Dam, it was 70% of normal, while in Honey Lake Valley at Fleming Fish & Game, where there were fewer rainy days, it was 96% of normal (6.62").

NOTE 1:

What are the hottest and coldest temperatures ever recorded in July in Nevada?

HOTTEST	122°	Laughlin	1986 & 1985
COLDEST	18°	San Jacinto	1913
		(near Contact)	

NOTE 2:

We are saddened to learn of the serious illness of Denio weather observer, Frances Prewett. We wish her a speedy recovery. Thanks to Mrs. Prewett's volunteer work the past 14 years, the State Climatologist's office was able earlier this year to have enough data to publish A Climatological Summary for Denio, based on 33 years of record. Because of lack of funding, this is the first Local Climatological Summary published for a Nevada substation since the early 1970's.

NOTE 3:

Our best wishes and sincere thanks go to Frank Morine, who was in charge of Nevada National Weather Service weather and climate observations, working out of the Reno NWS Airport Office. Frank was extremely helpful to the State Climatologist's office. Good luck in your retirement, Frank.

John James
State Climatologist

1987 * * *
PRELIMINARY NEVADA CLIMATE DATA
HEATING

GR.
24 HR.

DEPART
PRECIP
DEPART

HIGH
LOW
DEGREE
DAYS
BASE 65°

LOCATION

ELEV MAX MIN MEAN

DEPART

HIGH

LOW

DEGREE
DAYS

WEST

CARSON CITY 4650'

57.2

14th*
84

2nd
28

233

-89

INC.

-

DAGGETT PASS 7380

48.8

14th

2nd

-

-

1.50

-

FISH SPRINGS 3995

60.7

15th
91

2nd
30

-

-

1.41

-

FLEMING F&G, 4000
CA

58.2

7th
90

3rd
25

-

-

1.77

-

GLENBROOK

50.7

6th
74

2nd
27

441

-58

INC.

-

INCLINE

53.0

6th
81

2nd
26

-

-

1.19

-

MINDEN AP

4709 NO DATA RECEIVED

MT. ROSE 7500
BOWL

47.6

14th
72

1st
24

-

-

1.40

-

RED ROCK 4760
VALLEY

62.7

15th
88

30th
36

-

-

.99

-

RENO WSFO
AP

59.8

14th
90

12th
31

182

-151

2.29

-

RENO UNR

59.5

7th
87

2nd
32

-

-

.96

-

SUTCLIFFE-
PYRAMID LAKE

61.8

9th
87

2nd
40

-

-

1.23

-

SWEETWATER

6275 NO DATA RECEIVED

TOPAZ LAKE

56.9

14th
84

1st
30

-

-

2.17

-

LOCATION	ELEV	MAX	MIN	MEAN	DEPART	HIGH	LOW	HEATING DEGREE DAYS	DEPART	PRECIP	DEPART	GR. 24 HR.
BASE: 65°												
VIRGINIA CITY	6340'	67.0	45.8	56.4	+3.7	14th 81	1st 31	275	-96	1.18	+1.11	25th .43
WEST CENTRAL												
FALLON EXP. STATION	3965	73.9	44.7	59.3	+1.7	14th 87	2nd 28	198	-54	2.38	+1.76	9th 1.11
FALLON NAS	3935	81.2	50.0	65.6	-	14th 96	3rd 36	-	-	2.43	-	10th .86
GERLACH	3800	73.0	48.6	60.8	-	15th 89	2nd 37	-	-	2.44	-	25th .75
HAWTHORNE AP	4215	76.3	48.7	62.5	+2.3	14th 91	2nd 37	-	-	1.04	+3.38	20th .52
LAHONTAN DAM	4150	77.4	52.6	65.0	+4.0	14th 91	2nd 37	90	-	.76	+2.23	10th .35
LOVELOCK	3957	74.2	46.6	60.4	+2.3	14th 89	2nd 34	174	-72	2.42	+1.91	18th .58
MINA	4552	75.8	48.8	62.3	+2.5	15th 92	7th 37	135	-76	2.09	+1.49	17th .55
RYE PATCH DAM	4135	76.0	44.1	60.0	+3.1	15th 93	21st 31	195	-76	2.26	+1.42	26th .64
SMITH 6N	5000	72.8	42.5	57.6	+3.2	14th 89	2nd 25	217	-	2.55	+1.90	16th .36
WABUSKA 5 SE	4300	INCOMPLETE DATA			-	16th* 88	-	-	-	1.19	-	26th .49
WADSWORTH 4N	4200	INCOMPLETE DATA			-	14th 91	2nd 33	-	-	1.87	+3.33	17th 1.18
YERINGTON	4375	NO DATA RECEIVED										
NORTHWEST												
DENIO	4158	NO DATA RECEIVED										
LEONARD CREEK RANCH	4224	74.3	43.7	59.0	-	7th 91	3rd 29	-	-	1.59	-	17th .62

LOCATION	ELEV	MAX	MIN	MEAN	DEPART	DATE	21st	260	DEGREE DAYS	BASE: 65°	1.40	+0.4	25th
OROVADA	4310	71.2	42.5	56.8	+2.0	89	31						.43
WINNEMUCCA AP	4295	73.5	43.2	58.4	+3.7	14th 91	2nd 27	221	-113		3.38	+2.58	16th 1.70
WINNEMUCCA	4350	73.2	45.4	59.3	-	14th 91	2nd 30	205	-		3.54	-	26th 1.15
NORTHEAST ARTHUR 4N	6300	63.0	40.6	51.8	-	14th 78	22nd 31	407	-		3.30	+1.70	16th .70
BATTLE MTN. AP	4340	72.8	40.9	56.3	+1.6	14th 92	3rd 22	261	-59		4.91	+4.06	16th 1.46
BEOWAWE	4700	71.9	43.7	57.8	+3.1	8th 89	3rd 26	242	-95		6.16	+5.23	26th 1.41
CLOVER VALLEY	5750	67.0	40.4	53.7	-	14th 80	3rd 28	-	-		2.49	-	.46
CONTACT	5365	70.4	41.9	56.1	+4.0	10th 88	22nd 31				2.34	+0.62	16th .56
ELKO FAA AP	5075	71.2	40.1	55.7	+3.3	14th 89	3rd 25	285	-111		1.80	+0.77	17th .39
GIBBS RANCH	6000	65.7	37.8	51.7	-	7th 80	3rd 21	-	-		3.56	-	16th .80
JACKPOT	5290	68.8	41.5	55.1	-	15th 83	3rd 27	-	-		3.71	-	16th 1.09
METROPOLIS	5800	67.2	43.2	55.2	-	14th 84	2nd 27	-	-		3.41	-	17th .95
MONTELLLO	4880	72.6	39.3	55.9	+1.2	15th 87	4th 27	282	-		1.99	+0.90	20th .53
MOUNTAIN CITY	5641	65.8	36.8	51.3	+4.0	15th* 80	7th 22	-	-		4.17	+2.66	16th 1.25

GR.
24 HR.

DEPART

PRECIP

DEPART

HEATING
DEGREE

LOW

HIGH

DEPART

MEAN

MIN

MAX

ELEV

LOCATION

BASE: 65°
DAYS17th
.41

+1.23

2.59

-

22nd
3214th
82

+2.7

54.8

41.7

68.0

6012

RUBY LAKE
NWR16th
.69

-

3.01

-

1st
714th
84

-

52.0

38.7

65.3

6170

TUSCARORA

17th
.38

+ .63

1.98

-58

4th*
2214th
82

+1.8

52.5

38.1

67.0

5650

WELLS

17th
.99

-

4.65

-

3rd
2315th
80

-

48.5

33.6

63.5

6226

WILDHORSE
RESERVOIR15th
1.30

+3.86

5.27

-62

2nd
276th
81

+1.6

53.3

41.4

65.2

6605

EAST CENTRAL
AUSTIN17th
.67

+1.27

2.35

-54

3rd
2131st
80

+1.4

51.5

34.8

68.2

6260

ELY WSO AP

17th
.54

+ .97

2.11

-

3rd
3115th
79

+1.5

53.8

41.8

65.8

6825

GT. BASIN
N.P.
(LEHMAN CAVES)25th
1.30

-

2.87

-

2nd
2214th
79

-

49.3

35.7

63.0

7130

MANHATTEN

18th
.37

+1.01

1.54

-50

25th
3313th
83

+1.0

56.2

41.5

71.0

5625

SMOKEY
VALLEY16th
.72

-

1.17

-

26th
4114th
95

-

67.5

52.8

82.2

3400

SOUTH CENTRAL
ALAMO-
PAIRANAGAT16th
.35

+ .51

1.15

-

3rd
3614th
89

+0.9

60.8

44.9

76.7

4400

CALIENTE

15th
.34

+ .80

1.31

-85

1st
3514th
87

+2.8

59.9

45.2

74.6

4975

DYER 4SE

GOLDFIELD 5690 NO DATA RECEIVED

15th
.64

+1.54

2.49

-48

26th
3514th
82

+0.8

56.9

44.4

69.5

6165

PIOCHE

GR.
24 HR.

DEPART

PRECIP

DEPART

HEATING
DEGREE
DAYS

LOW

HIGH

DEPART

MEAN

MIN

MAX

ELEV

LOCATION

BASE: 65°

SUNNYSIDE	5300	73.9	41.7	57.8	14th 85	22nd 33	1.48	16th .73
SILVERPEAK	4263	79.0	48.0	63.5	31st 91	21st 39	1.35	25th .33
TONOPAH AP	5425	72.9	45.3	59.1	14th 83	2nd 37	1.97	16th .65
TONOPAH	6100	69.8	43.5	56.6	14th 82	1st 30	2.59	15th .79
SOUTHERN BEATTY 8N	3550	79.8	50.9	65.3	5th 92	21st 41	.66	12th .17
BOULDER CITY	2525	86.8	60.8	73.8	31st* 95	26th 47	.36	15th .16
DESERT NAT'L W. R.	2920	84.6	54.7	69.7	14th* 95	29th 47	1.20	16th 1.10
DESERT ROCK	3300	81.5	56.2	68.8	14th 92	2nd 43	1.94	16th .92
LAS VEGAS AP	2160	87.0	61.9	74.5	14th* 97	26th* 53	.90	16th .83
LAS VEGAS SUNRISE MANOR	1820	88.3	60.5	74.4	15th 100	2nd 47	.94	17th .52
LAUGHLIN	550	96.2	66.4	81.3	6th 107	27th 54	.02	16th .02
LOGANDALE	1320	93.8	59.7	76.8	13th 108	4th 49	.24	16th .24
PAIRUMP	2670	83.4	53.1	68.2	7th 94	2nd 42	.62	14th .47
SEARCHLIGHT	3540	81.2	56.4	68.8	12th* 91	26th 43	.32	16th* .12

* LATEST OF MORE THAN ONE OCCURRENCE

NOTE: NORMALS BASED ON 1951-1980 PERIOD

MAY 1987



MAY 1987

